

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference PHFR030010WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/IB2004/000304	International filing date (<i>day/month/year</i>) 03 February 2004 (03.02.2004)	Priority date (<i>day/month/year</i>) 07 February 2003 (07.02.2003)
International Patent Classification (IPC) or national classification and IPC G06T 5/20		
Applicant KONINKLIJKE PHILIPS ELECTRONICS N.V.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input checked="" type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 740 14 35	Date of issuance of this report 12 August 2005 (12.08.2005) Authorized officer <div style="text-align: center; font-weight: bold;">Idhir Britel</div> Telephone No. +41 22 338 70 60
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

REC'D 01 JUN 2004

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To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/B2004/000304

International filing date (day/month/year)
03.02.2004

Priority date (day/month/year)
07.02.2003

International Patent Classification (IPC) or both national classification and IPC
G06T5/20

Applicant
KONINKLIJKE PHILIPS ELECTRONICS N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/B2004/000304

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/000304

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-8,10,12
	No: Claims	1,9,11,13
Inventive step (IS)	Yes: Claims	2-8,10
	No: Claims	12
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations

see separate sheet

1. Reference is made to the following document:

D1 : US 2003/026495 A1 (Gondek et al.) 6 February 2003

2. **Item V: Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

- 2.1 The present application fails to meet the requirements of Article 33(2) PCT because the subject matter of claim 1 is not novel, the reasons being as follows:

As to claim 1:

D1 discloses:

- Image processing system for generating a multidimensional adaptive oriented filter to be applied to the point intensities of an image formed in a number d of dimensions (see page 1, par. [0016] - page 2, par. [0022], comprising:
- analyzing means comprising means (5, fi) to estimate at each image point a probability measure (Fi) of the presence of a type of feature of interest and to determine from said probability measure a weighting control model (10) yielding a weighting control vector (11, Vc) for the user to control synthesized adaptive kernels at each image point (see page 2, par. [0022]); and
- synthesizing means for generating filter kernels at each image point adapted to the type of the features of interest, which filter kernels are controlled by the weighting control vector (see page 2, par. [0024], page 3, par. [0027] and page 5, par. [0049]).

This is the wording of present claim 1, the subject-matter of which consequently fails to meet the requirements of Article 33(2) PCT for lack of novelty.

- 2.2 Dependent claims 6 and 11-13 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to novelty and inventive step, the reasons being as follows:

As to claim 6:

D1 discloses:

- the features of interest are chosen among anisotropic features and isotropic features (see page 2, par. [0024]).

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This is the wording of present claim 6, the subject-matter of which consequently fails to meet the requirements of Article 33(2) PCT for lack of novelty.

As to claim 11:

Claim 11 is the corresponding method claim to present apparatus claim 1 and therefore also fails to meet the requirements of Article 33(2) PCT for lack of novelty applying the same respective reasoning as for claim 1 above.

As to claim 12:

D1 does not explicitly disclose:

- Medical examination apparatus comprising means to acquire d-dimensional image data $I(x)$, a system as claimed in one of claims 1 to 10 and further comprising a display system (154) for visualizing processed images and user control means (158) for selecting weighting parameters and/or acting on the user operator (10) and/or the selection unit (40).

This is considered obvious to the skilled person, since the method of D1 is a general image processing method (see page 4, par. [0046]) which can be applied to medical imaging without the exercise of an inventive step.

Claim 12 thus fails to meet the requirements of Article 33(3) PCT.

As to claim 13:

D1 discloses:

Claim 13 is the corresponding computer program product claim to present method claim 11 and therefore also to present apparatus claim 1 and therefore also fails to meet the requirements of Article 33(2) PCT for lack of novelty applying the same respective reasoning as for claims 1 and 11 above.

- 2.3 The combination of the features of dependent claim 2-8 and 10 seem to be neither known from, nor rendered obvious by, the available prior art. It is suggested therefore that a new independent claim be drafted to include these features, bearing in mind that the features known in combination in should be placed in the preamble of such a claim in accordance with Rule 6.3(b) PCT.
- 2.4 The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/IB2004/000304

- 2.5 The description is not in conformity with the claims as required by Rule 5.1(a)(iii) PCT. Care should be taken during revision, especially of the introductory portion including any statements of problem or advantages, not to add subject-matter which extends beyond the content of the application as originally filed (Article 34(2)(b) PCT).
- 2.6 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in document D1 is not mentioned in the description, nor is this document identified therein.

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